

## CLAIM AMENDMENTS

1 Claim 1 (currently amended): A network management system for discovering information  
2 about a network, comprising:  
3 a plurality of nodes;  
4 \_\_\_\_\_plural discovery agents on said nodes adapted to discover information concerning said  
5 network;  
6 each of said discovery agents having an associated discovery capability;  
7 each of said discovery agents having an associated discovery assignment; and  
8 collectively, said agent discovery assignments being a subset of said agent discovery  
9 capabilities.

1 Claim 2 (original): A system in accordance with Claim 1 wherein, collectively, said agent  
2 discovery capabilities are overlapping and said agent discovery assignments are substantially  
3 non-overlapping.

1 Claim 3 (original): A system in accordance with Claim 1 wherein said agent discovery  
2 assignments are based on said discovery capabilities.

1 Claim 4 (currently amended): A system in accordance with Claim 1 wherein said agent  
2 discovery assignments reflect one or more of data collection service registrations with said  
3 plural discovery agents, agent cost to obtain network information, load balancing among said  
4 plural discovery agents, and assignment churn.

1 Claim 5 (original): A system in accordance with Claim 1 wherein said agent discovery  
2 assignments comprise one or both of inband and outband discovery assignments.

1 Claim 6 (currently amended): A network management system for discovering information  
2 about a network, comprising:

3 a network manager node interconnected to plural agent nodes;

4 \_\_\_\_\_ a network manager on said network manager node;

5 plural discovery agents on said plural agent nodes connected to said network manager  
6 node;

7 each of said discovery agents having an associated discovery capability to obtain  
8 information concerning said network;

9 capability determining means for determining said agent discovery capabilities;

10 assignment computation means for computing agent discovery assignments for one or  
11 more of said discovery agents based on said agent discovery capabilities; and

12 assignment implementing means for implementing said agent discovery assignments at  
13 one or more of said discovery agents.

1 Claim 7 (original): A system in accordance with Claim 6 wherein said network manager is not  
2 part of said network.

1 Claim 8 (currently amended): A system in accordance with Claim 6 wherein one or more of  
2 said plural discovery agents are associated with nodes in said network.

1 Claim 9 (currently amended): A system in accordance with Claim 6 wherein said capability  
2 determining means comprises first means in said network manager for requesting a capability  
3 poll, second means in said plural discovery agents for performing a capability query, and third  
4 means in said plural discovery agents for providing a capability poll response to said network  
5 manager.

1 Claim 10 (currently amended): A system in accordance with Claim ~~10~~ wherein said  
2 assignment computation means is adapted to generate said agent assignments based on one or  
3 more of data collection service registrations between said network manager and said plural  
4 discovery agents, agent cost to obtain network information, load balancing among said plural  
5 discovery agents, and assignment churn.

1 Claim 11 (original): In association with a data storage network having a plurality of managed  
2 hosts, a plurality of storage devices, and a plurality of switching fabric nodes providing inband  
3 interconnections between said managed hosts and said storage devices, a data storage network  
4 management system for discovering information about said data storage network, comprising:

5 a network manager connected to said managed hosts via outband connections;

6 plural inband discovery agents operating on said managed hosts;

7 plural outband discovery agents operating on said network manager;

8 each of said discovery agents having an associated discovery capability to obtain  
9 information concerning said data storage network;

10 agent capability determining logic in said discovery agents adapted to generate agent  
11 capability information sets identifying said agent discovery capabilities, said agent capability

12 information sets being subsets of full agent discovery information sets obtainable by said  
13 agents;  
14 assignment computation logic in said network manager adapted to compute agent  
15 discovery assignments for one or more of said discovery agents based on said agent discovery  
16 capability information sets; and  
17 assignment implementing logic in said one or more discovery agents for implementing  
18 said agent discovery assignments.

1 Claim 12 (original): A method for obtaining intelligent discovery of network information in a  
2 network using a plurality of network discovery agents having mutually nonexclusive  
3 discovery capabilities, comprising:  
4 determining said agent discovery capabilities;  
5 computing agent assignments based on said agent discovery capabilities and a goal of  
6 limiting network discovery poll overhead; and  
7 implementing said agent assignments.

1 Claim 13 (original): A method in accordance with Claim 12 wherein said agent discovery  
2 capabilities are determined by performing capability polls representing subsets of full network  
3 discovery polls.

1 Claim 14 (original): A method in accordance with Claim 12 wherein said agent assignments  
2 are computed based on consideration of one or more of data collection service registrations

3 between said network manager and said agents, agent cost to obtain network information, load  
4 balancing among said agents, and assignment churn.

1 Claim 15 (original): A method in accordance with Claim 12 wherein said agent assignments  
2 are implemented by limiting the scope of agent discovery to a subset of said discovery  
3 capabilities.

1 Claim 16 (original): A network manager for managing a data storage network, comprising:  
2 agent discovery capability determining logic adapted to determine discovery  
3 capabilities of discovery agents in said data storage network;  
4 assignment computation logic adapted to compute agent discovery assignments based  
5 on said agent discovery capabilities;  
6 discovery poll request logic adapted to request network discovery from said agents  
7 according to said agent discovery assignments; and  
8 discovery poll response logic adapted to process network discovery received from said  
9 agents in response to said network discovery requests.

1 Claim 17 (original): A network discovery agent for use in a data storage network, comprising:  
2 discovery capability logic adapted to determine and provide agent discovery capability  
3 information to a requestor, said agent discovery capability information being a subset of all  
4 discovery information obtainable by said agent; and  
5 discovery query logic adapted to implement discovery queries based on agent  
6 discovery assignment information determined from said capability information.

1 Claim 18 (original): A computer program product for obtaining discovery of network  
2 information from plural information gathering agents, comprising:  
3 one or more data storage media;  
4 means recorded on said data storage media for programming a data processing  
5 platform to operate as a network manager to perform intelligent network discovery in a data  
6 storage network by:  
7 determining discovery capabilities of said agents;  
8 computing agent assignments based on said agent discovery capabilities;  
9 requesting one or more of said agents to perform network discovery according to said  
10 agent assignments; and  
11 processing discovery information returned by said one or more agents.

1 Claim 19 (original): A computer program product in accordance with Claim 18 wherein said  
2 agent discovery assignments are based on one or more of data collection service registrations  
3 between said network manager and said agents, agent cost to obtain network information, load  
4 balancing among said agents, and assignment churn.

1 Claim 20 (original): A computer program product for obtaining discovery of network  
2 information from plural information gathering agents, comprising:  
3 one or more data storage media;  
4 means recorded on said data storage media for programming a managed host in a data  
5 storage network to operate as an inband discovery agent or a network manager to operate as an

6 outband discovery agent that performs intelligent network discovery in conjunction with other  
7 agents by:

- 8 providing agent discovery capability information to a requester;
- 9 receiving agent discovery assignments from said requester that are based on said  
10 discovery capability information;
- 11 performing intelligent discovery according to said agent discovery assignments; and
- 12 providing intelligent discovery information received in response to said intelligent  
13 discovery to said requester.